ELSEVIER

Journal of Non-Crystalline Solids 177 (1994) 437–440

JOURNAL OF
NON-CRYSTALLINE SOLIDS

Author index

Adachi, H., see Kowada, Y. 177 (1994) 286
Akasaka, Y., see Yasui, I. 177 (1994) 91
Antonioli, G., P.P. Lottici, I. Manzini, G. Gnappi, A. Montenero, F. Paloschi and P. Parent, An EXAFS study of the local structure around Zr atoms in Y_2O_3-stabilized ZrO_2 by the sol–gel method 177 (1994) 179
Antonioli, G., see Capelletti, R. 177 (1994) 170

Bachra, B., see Cao, Y. 177 (1994) 317
Bain, D., see MacKenzie, J.W. 177 (1994) 269
Bhatnagar, A., see MacKenzie, J.W. 177 (1994) 269
Bhowmik, S., see MacKenzie, J.W. 177 (1994) 269
Biner, S.B., A numerical analysis of crack propagation in microcracking ceramic and ceramic composites 177 (1994) 36
Bionducci, M., F. Buffa, G. Licheri, A. Musinu, G. Navarra and G. Piccaluga, A reverse Monte Carlo study of SiO_2 and B_2O_3 glasses 177 (1994) 137
Bokov, N.A., Light scattering studies of glasses in the glass transition region 177 (1994) 74
Brow, R.K., D.R. Tallant, J.J. Hudgens, S.W. Martin and A.D. Irwin, The short-range structure of sodium ultraphosphate glasses 177 (1994) 221
Brow, R.K., see Reidmeyer, M.R. 177 (1994) 208
Brown, J.T., A. McMahon, C.L. Taylor and D.Y. Yum, The development and successful application of 100% oxygen–oil combustion for glass melters 177 (1994) 324
Budhwani, K., see MacKenzie, J.W. 177 (1994) 269
Buffa, F., see Bionducci, M. 177 (1994) 137

Cao, Y., A.N. Cormack, A.G. Clare, B. Bachra, A.C. Wright, R.N. Sinclair and A.C. Hannon, Points of contact between theory and experiment: a comparison of molecular dynamics and neutron diffraction results 177 (1994) 317
Capelletti, R., E. Colombi, G. Antonioli, P.P. Lottici, I. Manzini, G. Gnappi, A. Montenero and P. Parent, IR and EXAFS analysis of $x\mathrm{Bi}_2\mathrm{O}_3 \cdot (1-x)\mathrm{GeO}_2$ glasses 177 (1994) 170
Carl, M., see Ehrt, D. 177 (1994) 405
Clare, A.G., see Cao, Y. 177 (1994) 317
Colombi, E., see Capelletti, R. 177 (1994) 170
Coolbaugh, M.T., see Kochanowski, H.D.S.B.K. 177 (1994) 340
Cormack, A.N., see Cao, Y. 177 (1994) 317

Day, D.E., see Reidmeyer, M.R. 177 (1994) 208
Dickinson, J.T., L.C. Jensen, R.L. Webb and S.C. Langford, Photoluminescence imaging of mechanically produced defects in MgO 177 (1994) 1
Dickinson, J.T., see Watanabe, Y. 177 (1994) 9
Ding, M., see McMahon, A. 177 (1994) 432
Dorfeld, W.G., see Hayashi, T. 177 (1994) 331
Doy, T.K., see Kasai, T. 177 (1994) 397
Dunlap, T.G., see Kochanowski, H.D.S.B.K. 177 (1994) 340

Ehrt, D., M. Carl, T. Kittel, M. Müller and W. Seeber, High-performance glass for the deep ultraviolet range 177 (1994) 405
Ellison, A.J.G., see Price, D.L. 177 (1994) 293

Feller, S., see Royle, M. 177 (1994) 242
Feller, S.A., see MacKenzie, J.W. 177 (1994) 269
Ferber, M.K., see Jenkins, M.G. 177 (1994) 54
Fukui, K., see Kamijo, N. 177 (1994) 187
Fukunaga, T., see Umesaki, N. 177 (1994) 200

Gnappi, G., see Antonioli, G. 177 (1994) 179
Gnappi, G., see Capelletti, R. 177 (1994) 170
Gong, J.H., Z.D. Guan and J.J. Wu, *R*-curve behavior of indentation cracks in silicon nitride based ceramic composite 177 (1994) 46
Grimley, D.I., see Hannon, A.C. 177 (1994) 299
Guan, Z.D., see Gong, J.H. 177 (1994) 46
Guy, C., see Kamijo, N. 177 (1994) 187
Guy, C., see Umesaki, N. 177 (1994) 147

Hannon, A.C., D.I. Grimley, R.A. Hulme, A.C. Wright and R.N. Sinclair, Boroxol groups in vitreous boron oxide: new evidence from neutron diffraction and inelastic neutron scattering studies 177 (1994) 299

Hannon, A.C., see Cao, Y. 177 (1994) 317
Hayashi, T. and W.G. Dorfeld, Electrochemical study of As^{3+}/As^{5+} equilibrium in a barium borosilicate glass melt 177 (1994) 331
Hill, A.J., P.J. Newman, J. Javorniczky and D.R. MacFarlane, Heavy metal fluoride glasses studied by positron annihilation lifetime spectroscopy. I. Comparison of $53ZrF_4 \cdot (40-x)BaF_2 \cdot 4LaF_3 \cdot 3AlF_3 \cdot x$LiF and $53ZrF_4 \cdot 20BaF_2 \cdot 4LaF_3 \cdot 3AlF_3 \cdot (20-x)CsF \cdot x$LiF 177 (1994) 277
Himei, Y., A. Osaka, T. Nanba and Y. Miura, Coordination change of Te atoms in binary tellurite glasses 177 (1994) 164
Horio, K., see Kasai, T. 177 (1994) 397
Horiuchi, M., T. Sei and T. Tsuchiya, Preparation and properties of superionic conducting glasses containing lithium halide 177 (1994) 236
Hudgens, J.J., see Brow, R.K. 177 (1994) 221
Hulme, R.A., see Hannon, A.C. 177 (1994) 299

Iga, M., see Kamihori, T. 177 (1994) 363
Iida, T., see Umesaki, N. 177 (1994) 200
Inoue, H., see Yasui, I. 177 (1994) 91
Irwin, A.D., see Brow, R.K. 177 (1994) 221

Javorniczky, J., see Hill, A.J. 177 (1994) 277
Jenkins, M.G., E. Lara-Curzio, M.K. Ferber and J.A. Salem, Observations of inelastic deformation during high-temperature fatigue and failure of a polycrystalline silicon nitride 177 (1994) 54
Jensen, L.C., see Dickinson, J.T. 177 (1994) 1

Kakihara, S., see Kamihori, T. 177 (1994) 363
Kamihori, T., M. Iga, S. Kakihara and H. Mase, An integrated mathematical model of float process 177 (1994) 363
Kamijo, N., N. Umesaki, K. Fukui, C. Guy, K. Tadanaga, M. Tatsumisago and T. Minami, Soft X-ray XAFS: local structure of mullite gels prepared from modified aluminium alkoxides 177 (1994) 187
Kamijo, N., see Umesaki, N. 177 (1994) 147
Kasai, T., K. Horio, T. Yamazaki, M. Komoda, T.K. Doy and N. Kubo, Polishing to reveal micro-defects on glass 177 (1994) 397
Kato, K., see Sakai, C. 177 (1994) 372
Kirihara, T., see Umesaki, N. 177 (1994) 200
Kita, Y., see Umesaki, N. 177 (1994) 200
Kittel, T., see Ehrt, D. 177 (1994) 405
Kobayashi, A.S., see Yu, C.-T. 177 (1994) 26
Kochanowski, H.D.S.B.K., C.W. Schreiber, A.B. Morgan, M.T. Coolbaugh and T.G. Dunlap, Compositional dependence of redox equilibria in sodium silicate glasses 177 (1994) 340
Koide, M., R. Sato, T. Komatsu and K. Matusita, Low-temperature deformation of fluoride and oxide glass fibers below their glass transition temperatures 177 (1994) 427
Koide, M., see Matusita, K. 177 (1994) 216
Kokubo, T., see Naka, J. 177 (1994) 420
Komatsu, T., see Koide, M. 177 (1994) 427
Komatsu, T., see Matusita, K. 177 (1994) 216
Komoda, M., see Kasai, T. 177 (1994) 397
Komori, K., see Naka, J. 177 (1994) 420
Kowada, Y., H. Adachi, M. Tatsumisago and T. Minami, Electronic states of modifier ions in silicate glasses 177 (1994) 286
Kowada, Y., see Tatsumisago, M. 177 (1994) 154
Kubo, N., see Kasai, T. 177 (1994) 397
Kubuki, S., see Nishida, T. 177 (1994) 193

Langford, S.C., see Dickinson, J.T. 177 (1994) 1
Langford, S.C., see Watanabe, Y. 177 (1994) 9
Lara-Curzio, E., see Jenkins, M.G. 177 (1994) 54
Lee, S.-K., see Tatsumisago, M. 177 (1994) 154
Licheri, G., see Bionducci, M. 177 (1994) 137
Lottici, P.P., see Antonioli, G. 177 (1994) 179
Lottici, P.P., see Capelletti, R. 177 (1994) 170

MacFarlane, D.R., see Hill, A.J. 177 (1994) 277
MacKenzie, J., see Royle, M. 177 (1994) 242
MacKenzie, J.W., A. Bhatnagar, D. Bain, S. Bhowmik, C. Parameswar, K. Budhwani, S.A. Feller, M.L. Royle and S.W. Martin, ^{29}Si MAS-NMR study of the short range order in alkali borosilicate glasses 177 (1994) 269
Manzini, I., see Antonioli, G. 177 (1994) 179
Manzini, I., see Capelletti, R. 177 (1994) 170
Martin, S.W., see Brow, R.K. 177 (1994) 221
Martin, S.W., see MacKenzie, J.W. 177 (1994) 269
Mase, H., see Kamihori, T. 177 (1994) 363
Matusita, K., N. Osawa, M. Koide, R. Sato and T. Komatsu, Viscous flow mechanism of oxyfluoride glasses related to glass structure 177 (1994) 216
Matusita, K., see Koide, M. 177 (1994) 427
McGinnis, P.B. and J.E. Shelby, Diffusion of water in float glass melts 177 (1994) 381
McMahon, A. and M. Ding, A partial conversion of a gas–air fired television furnace to oxy-fuel combustion 177 (1994) 432
McMahon, A., see Brown, J.T. 177 (1994) 324
Minami, T., see Kamijo, N. 177 (1994) 187
Minami, T., see Kowada, Y. 177 (1994) 286
Minami, T., see Tatsumisago, M. 177 (1994) 154
Misawa, M., see Umesaki, N. 177 (1994) 200
Mitchell, T.E., see Reimanis, I.E. 177 (1994) 67
Miura, Y., see Himei, Y. 177 (1994) 164
Miura, Y., see Nanba, T. 177 (1994) 131
Miyaji, T., see Nanba, T. 177 (1994) 131
Montenero, A., see Antonioli, G. 177 (1994) 179

Montenero, A., see Capelletti, R. 177 (1994) 170
Morgan, A.B., see Kochanowski, H.D.S.B.K. 177 (1994) 340
Müller, M., see Ehrt, D. 177 (1994) 405
Musinu, A. and G. Piccaluga, X-ray diffraction studies of multicomponent oxide glasses 177 (1994) 81
Musinu, A., G. Paschina, G. Piccaluga and G. Pinna, Short range order of metaphosphate glasses by X-ray diffraction. 177 (1994) 97
Musinu, A., see Bionducci, M. 177 (1994) 137

Naka, J., S. Yamamoto, K. Komori, S. Yamakawa and T. Kokubo, Development of glass fiber with high dielectric constant 177 (1994) 420
Nakamura, Y., see Watanabe, Y. 177 (1994) 9
Nanba, T., T. Miyaji, J. Takada, A. Osaka, Y. Miura and I. Yasui, Computer simulation on the structure and vibrational spectra in Ge–Pb–O–F glass 177 (1994) 131
Nanba, T., see Himei, Y. 177 (1994) 164
Navarra, G., see Bionducci, M. 177 (1994) 137
Newman, P.J., see Hill, A.J. 177 (1994) 277
Nishida, T., S. Kubuki and Y. Takashima, IR transmission method applied to the crystallization of gallate glasses and the mechanism of crystallization caused by Ar^+ laser and ^{60}Co γ-ray irradiation 177 (1994) 193
Nishida, T., Advances in the Mössbauer effect for the structural study of glasses 177 (1994) 257

Okamura, K., see Umesaki, N. 177 (1994) 147
Osaka, A., see Himei, Y. 177 (1994) 164
Osaka, A., see Nanba, T. 177 (1994) 131
Osawa, N., see Matusita, K. 177 (1994) 216

Paloschi, F., see Antonioli, G. 177 (1994) 179
Parameswar, C., see MacKenzie, J.W. 177 (1994) 269
Parent, P., see Antonioli, G. 177 (1994) 179
Parent, P., see Capelletti, R. 177 (1994) 170
Paschina, G., see Musinu, A. 177 (1994) 97
Petrovic, J.J., see Reimanis, I.E. 177 (1994) 67
Piccaluga, G., see Bionducci, M. 177 (1994) 137
Piccaluga, G., see Musinu, A. 177 (1994) 81
Piccaluga, G., see Musinu, A. 177 (1994) 97
Pinna, G., see Musinu, A. 177 (1994) 97
Price, D.L. and A.J.G. Ellison, Atomic structure and dynamics of fast-ion conducting glasses 177 (1994) 293

Reidmeyer, M.R., D.E. Day and R.K. Brow, Phosphorus oxynitride glasses of variable sodium content 177 (1994) 208
Reimanis, I.E., J.J. Petrovic and T.E. Mitchell, The fracture behavior of single-crystal $Y_3Al_5O_{12}$ 177 (1994) 67
Ross, C.P., Southern California's latest approach to air emission reductions for glass furnaces 177 (1994) 389
Royle, M., J. MacKenzie, J. Taylor, M. Sharma and S. Feller, Densities, glass transition temperatures, and structural models resulting from extremely modified caesium and rubidium borate glasses 177 (1994) 242
Royle, M.L., see MacKenzie, J.W. 177 (1994) 269

Sakai, C., K. Kato, G. Yamane and I. Yamaguchi, Origin of Na_2SO_4 blisters in sheet glass 177 (1994) 372
Salem, J.A., see Jenkins, M.G. 177 (1994) 54
Sato, R., see Koide, M. 177 (1994) 427
Sato, R., see Matusita, K. 177 (1994) 216
Schreiber, C.W., see Kochanowski, H.D.S.B.K. 177 (1994) 340
Seeber, W., see Ehrt, D. 177 (1994) 405
Sei, T., see Horiuchi, M. 177 (1994) 236
Shakhmatkin, B.A., N.M. Vedishcheva, M.M. Shultz and A.C. Wright, The thermodynamic properties of oxide glasses and glass-forming liquids and their chemical structure 177 (1994) 249
Sharma, M., see Royle, M. 177 (1994) 242
Shelby, J.E., see McGinnis, P.B. 177 (1994) 381
Shoji, K. and I. Yasui, Structures of RF_2–$AlPO_4$ glasses revealed by diffraction and MD calculations 177 (1994) 125
Shultz, M.M., see Shakhmatkin, B.A. 177 (1994) 249
Sinclair, R.N., see Cao, Y. 177 (1994) 317
Sinclair, R.N., see Hannon, A.C. 177 (1994) 299
Suzuki, K., see Umesaki, N. 177 (1994) 147
Suzuya, K., see Umesaki, N. 177 (1994) 147

Tadanaga, K., see Kamijo, N. 177 (1994) 187
Takada, J., see Nanba, T. 177 (1994) 131
Takashima, Y., see Nishida, T. 177 (1994) 193
Tallant, D.R., see Brow, R.K. 177 (1994) 221
Tatsumisago, M., S.-K. Lee, T. Minami and Y. Kowada, Raman spectra of TeO_2-based glasses and glassy liquids: local structure change with temperature in relation to fragility of liquid 177 (1994) 154
Tatsumisago, M., see Kamijo, N. 177 (1994) 187
Tatsumisago, M., see Kowada, Y. 177 (1994) 286
Taylor, C.L., see Brown, J.T. 177 (1994) 324
Taylor, J., see Royle, M. 177 (1994) 242
Tsuchiya, T., see Horiuchi, M. 177 (1994) 236

Umesaki, N., C. Guy, N. Kamijo, K. Okamura, K. Suzuya and K. Suzuki, An XAFS study of the poly-carbosilane conversion to Si_xC_{1-x} 177 (1994) 147
Umesaki, N., Y. Kita, T. Kirihara, T. Iida, T. Fukunaga and M. Misawa, A molecular dynamics and neutron diffraction study of the structure of Na_2O–B_2O_3 melts 177 (1994) 200
Umesaki, N., see Kamijo, N. 177 (1994) 187

Vedishcheva, N.M., see Shakhmatkin, B.A. 177 (1994) 249
Vessal, B., Simulation studies of silicates and phosphates 177 (1994) 103
Viskanta, R., Review of three-dimensional mathematical modeling of glass melting 177 (1994) 347

Watanabe, Y., Y. Nakamura, J.T. Dickinson and S.C. Langford, Changes in air-exposed fracture surfaces of silicate glasses observed by atomic force microscopy 177 (1994) 9
Webb, R.L., see Dickinson, J.T. 177 (1994) 1
Wright, A.C., see Cao, Y. 177 (1994) 317
Wright, A.C., see Hannon, A.C. 177 (1994) 299
Wright, A.C., see Shakhmatkin, B.A. 177 (1994) 249
Wu, J.J., see Gong, J.H. 177 (1994) 46

Yamaguchi, I., see Sakai, C. 177 (1994) 372
Yamakawa, S., see Naka, J. 177 (1994) 420
Yamamoto, S., see Naka, J. 177 (1994) 420
Yamane, G., see Sakai, C. 177 (1994) 372
Yamazaki, T., see Kasai, T. 177 (1994) 397
Yasui, I., Y. Akasaka and H. Inoue, Re-examination of detailed structure of alkali silicate glasses based on two types of diffraction data 177 (1994) 91
Yasui, I., see Nanba, T. 177 (1994) 131
Yasui, I., see Shoji, K. 177 (1994) 125
Yi, J.J.L., Mathematical model representing structure–property relationships of glass 177 (1994) 229
Yu, C.-T. and A.S. Kobayashi, Fracture process zone associated with mixed mode fracture of SiC_w/Al_2O_3 177 (1994) 26
Yum, D.Y., see Brown, J.T. 177 (1994) 324

ELSEVIER

Journal of Non-Crystalline Solids 177 (1994) 441–442

JOURNAL OF
NON-CRYSTALLINE SOLIDS

Subject index

Borates
Borates 177 (1994) 242
Light Scattering 177 (1994) 74
Molecular Dynamics, Neutron Inelastic Scattering 177 (1994) 200
Neutron Diffraction, Neutron Inelastic Scattering 177 (1994) 299
Nuclear Magnetic Resonance, Short-Range Order 177 (1994) 269

Bubbles
Bubbles 177 (1994) 372

Computer Simulation
Modelling 177 (1994) 347

Coordination
Glasses Containing Transition Metal Ions, Oxidation Reduction 177 (1994) 340

Crystallization
Phase Transition 177 (1994) 193

Defects
Luminescence, Mechanical Properties 177 (1994) 1

Dielectric Properties
Glass Fibers 177 (1994) 420

Diffusion
Kinetics, Water in Glass 177 (1994) 381

Electronic Structure
Modelling 177 (1994) 286

Equilibrium
Thermodynamics 177 (1994) 331

EXAFS
EXAFS 177 (1994) 147
Germanates, Infra-red Absorption 177 (1994) 170

Fluorides
Positron Annihilation 177 (1994) 277

Fracture
Fracture 177 (1994) 26
Fracture 177 (1994) 67
Mechanical Properties 177 (1994) 36
Surface Reactions 177 (1994) 9

Gels
Structure 177 (1994) 187

Germanates
EXAFS, Infra-red Absorption 177 (1994) 170

Glass Fibers
Dielectric Properties 177 (1994) 420

Glasses
Glasses 177 (1994) 389
Phosphates 177 (1994) 221

Glasses Containing Transition Metal Ions
Coordination, Oxidation Reduction 177 (1994) 340

Hall Coefficient
Hall Coefficient 177 (1994) 405

Infra-red Absorption
EXAFS, Germanates 177 (1994) 170

Ionic Conductivity
Ionic Conductivity 177 (1994) 236
Ionic Conductivity 177 (1994) 293

Kinetics
Diffusion, Water in Glass 177 (1994) 381

Light Scattering
Borates 177 (1994) 74

Luminescence
Defects, Mechanical Properties 177 (1994) 1

Mechanical Properties
Defects, Luminescence 177 (1994) 1
Fracture 177 (1994) 36

Melting
Melting 177 (1994) 324
Melting 177 (1994) 432

Modelling
Computer Simulation 177 (1994) 347
Electronic Structure 177 (1994) 286
Modelling 177 (1994) 137
Modelling 177 (1994) 229
Modelling 177 (1994) 363
Oxyhalides 177 (1994) 131
Phosphates 177 (1994) 125
Structure 177 (1994) 91
Thermodynamics 177 (1994) 249

Molecular Dynamics
Borates, Neutron Inelastic Scattering 177 (1994) 200
Molecular Dynamics 177 (1994) 103
Neutron Diffraction 177 (1994) 317

Mössbauer Effect
Mössbauer Effect 177 (1994) 257

Neutron Diffraction
Borates, Neutron Inelastic Scattering 177 (1994) 299
Molecular Dynamics 177 (1994) 317

Neutron Inelastic Scattering
Borates, Molecular Dynamics 177 (1994) 200
Borates, Neutron Diffraction 177 (1994) 299

Nuclear Magnetic Resonance
Borates, Short-Range Order 177 (1994) 269

Oxidation Reduction
Coordination, Glasses Containing Transition Metal Ions 177 (1994) 340

Oxyhalides
Modelling 177 (1994) 131
Viscosity 177 (1994) 216

Oxynitride Glasses
Oxynitride Glasses 177 (1994) 208

Phase Transition
Crystallization 177 (1994) 193

Phosphates
Glasses 177 (1994) 221
Modelling 177 (1994) 125
Short-Range Order 177 (1994) 97

Positron Annihilation
Fluorides 177 (1994) 277

Short-Range Order
Borates, Nuclear Magnetic Resonance 177 (1994) 269
Phosphates 177 (1994) 97
X-ray Diffraction 177 (1994) 81

Silicon Nitride
Strength 177 (1994) 54

Sol–Gel Method
Zirconia 177 (1994) 179

Strength
Silicon Nitride 177 (1994) 54
Strength 177 (1994) 46

Stress Relaxation
Stress Relaxation 177 (1994) 427

Structure
Gels 177 (1994) 187
Modelling 177 (1994) 91

Surface Analysis
Surface Analysis 177 (1994) 397

Surface Reactions
Fracture 177 (1994) 9

Tellurite Glasses
Tellurite Glasses 177 (1994) 154
Tellurite Glasses 177 (1994) 164

Thermodynamics
Equilibrium 177 (1994) 331
Modelling 177 (1994) 249

Viscosity
Oxyhalides 177 (1994) 216

Water in Glass
Diffusion, Kinetics 177 (1994) 381

X-ray Diffraction
Short-Range Order 177 (1994) 81

Zirconia
Sol–Gel Method 177 (1994) 179